

UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF MICHIGAN
SOUTHERN DIVISION

BISSELL HOMECARE, INC.,

Plaintiff/Counter-Defendant,

CASE NO. 1:08-CV-724

v.

HON. ROBERT J. JONKER

DYSON, INC.,

Defendant/Counter-Plaintiff.

CLAIM CONSTRUCTION MEMORANDUM OPINION AND ORDER

Background

This is a patent infringement case. Bissell Homecare, Inc. (“Bissell”) alleges that Dyson, Inc. (“Dyson”) is infringing one or more of three patents Bissell owns, including U.S. Patent Nos. 6,344,064 (the “‘064 Patent”), 6,582,489 (the “‘489 Patent”), and 7,247,181 (the “‘181 Patent”) (collectively, the “Bissell Patents”). (First Am. Compl., docket # 7, ¶¶ 10-12, 31). Both Bissell and Dyson are in the business of, among other things, manufacturing and selling vacuum cleaners for home use. The Bissell Patents concern cyclonic vacuum cleaner technology. (docket # 98 at 1.) A cyclonic vacuum cleaner uses a spinning motion to separate particles of dirt and other detritus from the air stream, collecting the separated particles in one or more storage areas and exhausting the clean air from which the particles have been separated. (*Id.*)

At the Court’s invitation, the parties have identified terms for which they believe construction is most important to advance the case, and they have proposed competing constructions of these terms. (docket # 91.) The Court heard oral argument on the parties’ proposed constructions on

April 30, 2010. This Claims Construction Memorandum contains the Court’s construction of these disputed terms.

Principles of Claim Construction

Construction of patent claims is a matter of law. *See Cybor Corp. v. FAS Techs., Inc.*, 138 F.3d 1448, 1454-56 (Fed. Cir. 1998) (en banc). When there is a dispute about the meaning of language used in a claim, the court must ascertain the scope of the exclusive rights claimed in the patent. *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 979 (Fed. Cir. 1995) (en banc), *aff’d* 517 U.S. 370, 116 S. Ct. 1384 (1996). Proper claim construction begins with the language of the claims themselves. *See Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996). ““In construing claims, the analytical focus must begin and remain centered on the language of the claims themselves, for it is that language that the patentee chose to use to “particularly point[] out and distinctly claim[] the subject matter which the patentee regards as his invention.” 35 U.S.C. § 112, ¶ 2.”” *Brookhill-Wilk 1, LLC v. Intuitive Surgical, Inc.*, 334 F.3d 1294, 1298 (Fed. Cir. 2003) (quoting *Interactive Gift Express, Inc. v. Compuserve, Inc.*, 256 F.3d 1323, 1331 (Fed. Cir. 2001)). The Court must give claim terms the ordinary and customary meaning ascribed to them by “a person of ordinary skill in the art in question at the time of the invention, i.e, as of the effective filing date of the patent application.” *Phillips v. AWH Corp.*, 415 F.3d 1303, 1313 (Fed. Cir. 2005) (en banc). This “starting point is based on the well-settled understanding that inventors are typically persons skilled in the field of the invention and that patents are addressed to and intended to be read by others of skill in the pertinent art.” *Id.* A court must also consider the written description in the patent, “because it is relevant not only to aid in the claim construction analysis, but also to determine if the presumption of ordinary and customary meaning is rebutted.” *Brookhill-Wilk 1, LLC*, 334 F.3d at

1298. In fact, the specification is usually “the single best guide to the meaning of a disputed term.” *Vitronics*, 90 F.3d at 1582. The prosecution history may also be relevant because it may “inform the meaning of the claim language by demonstrating how the inventor understood the invention and whether the inventor limited the invention in the course of prosecution, making the claim scope narrower than it would otherwise be.” *Phillips*, 415 F.3d at 1317.

A court may resort to extrinsic evidence, such as dictionaries, treatises, and expert or inventor testimony, in construing patent claims. *See id.* Technical dictionaries may help a court understand “the meaning of particular terminology to those of skill in the art of the invention.” *Id.* at 1318. Likewise, expert testimony may be useful for explaining the technology at issue and how the particular invention works, to ensure that the court’s understanding of the technical aspects of the patent is consistent with that of a person of ordinary skill in the art, or to establish that a particular claim in the patent or in prior art has a particular meaning in the pertinent field. *See id.* However, the intrinsic evidence of the specification and prosecution history is generally more reliable and thus generally entitled to greater weight. *See id.* at 1320-21. Both intrinsic and extrinsic evidence can facilitate a proper claim construction, but what ultimately controls is, of course, the language of the claims themselves: “[T]he court’s focus [must] remain[] on understanding how a person of ordinary skill in the art would understand the claim terms.” *Id.* at 1323. Thus, “[t]he construction that stays true to the claim language and most naturally aligns with the patent’s description of the invention will be, in the end, the correct construction.” *Id.* at 1316 (quoting *Renishaw PLC v. Marposs Societa’ per Azioni*, 158 F.3d 1243, 1250 (Fed. Cir. 1995)).

Analysis

1. '064 Patent, Claim 24(e): “directing means for directing particles from the first particle separating means to the first particle collecting means”

In construing this disputed claim, the Court must use a means plus function analysis under 35 U.S.C. § 112 ¶ 6, which provides that

[a]n element in a claim for a combination may be expressed as a means or step for performing a specified function without the recital of structure, material, or acts in support thereof, and such claim shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof.

This type of “claiming applies only to purely functional limitations that do not provide the structure that performs the recited function.” *Phillips*, 415 F.3d at 1311. A claim limitation that actually uses the word “means” gives rise to a rebuttable presumption that § 112, ¶ 6 applies. *Personalized Media Commc’n, LLC v. Int’l Trade Comm’n*, 161 F.3d 696, 703-04 (Fed. Cir. 1998). The presumption is rebutted if the claim uses the word “means” but fails to specify corresponding function for the “means.” *See Sage Prods., Inc. v. Devon Indus., Inc.*, 126 F.3d 1420, 1427 (Fed. Cir. 1997). The presumption is also rebutted if the claim, in addition to the functional language, recites structure sufficient to perform the claimed function in its entirety. *See Altiris, Inc. v. Symantec Corp.*, 318 F.3d 1363, 1367 (Fed. Cir. 2003). The parties agree that a means plus function analysis is appropriate in construing this claim.

The parties agree on the function of this claim term, but they disagree about which structures the ‘064 Patent discloses for performing the “directing means” function. The parties take the following positions:

Claim Term	Dyson Proposed Construction	Bissell Proposed Construction
<u>‘064/24 (e) directing means for directing particles from the first particle separating means to the first particle collecting means;</u>	<p>This element should be construed under § 112, ¶ 6.</p> <p>Function: directing particles from the first particle separating means to the first particle collecting means.</p> <p>Corresponding structure in the ‘064 specification: the guide or spout 74 shown in Fig. 6 and described at column 6, lines 53-63 (Jt. State.)</p> <p>“At the very least, the ‘directing means’ limitation in Claim 24 should be construed to include both transfer member 48 and guide or spout 74 in Figure 6” (Resp. Br. P.5)</p>	<p>Subject to 35 U.S.C. § 112, ¶ 6</p> <p>The function of the directing means is to direct particles from a first particle separating means to a first particle collecting means.</p> <p>Structures disclosed for performing the directing means function include, for example, those disclosed at 2:6-14; 2:47-67; 3:11-37; 4:45-67; 5:1-11; 5:29-35; 6:50-67; and 7:1-44. Examples of structures performing the claimed function include the various disclosed directing means, 48, and their associated structures, which are described in the context of FIGS. 2-9. (Jt. State.)</p>

Dyson proposes limiting the claim term to a single structure, “the guide or spout 74 shown in Fig. 6 and described at column 6, lines 53-63.” According to Dyson, spout 74 – either by itself or together with transfer member 48 – is the only structure “clearly associat[ed] with performance of the function” as required by governing case law, including *Cardiac Pacemakers, Inc. v. St. Jude Med., Inc.*, 296 F.3d 1106, 1113 (Fed. Cir. 2002), and *Texas Digital Sys., Inc. v. Telegenix, Inc.*, 308 F.3d 1193, 1208-09 (Fed. Cir. 2002). Bissell argues that the patent specification discloses multiple structures for the stated function that do not include spout 74 at all. Indeed, Bissell notes, the patent discloses spout 74 as an optional embodiment.

The Court adopts Bissell’s construction because the patent plainly links the particle directing means (transfer member 48) to the claimed function. Bissell notes correctly that the ‘064 Patent repeatedly discloses structures other than guide or spout 74 for performing the directing function, including, for example, at 2:6-14; 2:47-67; 3:11-37; 4:45-67; 5:1-11; 5:29-35; 6:50-67; and 7:1-44. Indeed, regarding the very figure Dyson cites to support its proposed construction, the patent language states that “referring to FIG. 6, transfer member 48 comprises a disc canted to *direct* deposited particles laterally to side container 70.” (6:56-63) (emphasis added.) This language expressly belies Dyson’s attempt to craft a distinction between the word “direct” and the word “transfer,” and to claim that transfer member 48 functions only to “transfer” particles, not “direct” them. The patent language just quoted demonstrates that the words are synonyms for purposes of the claimed term. The patent also states that “[p]referably, as shown in FIG. 2, transfer member 48 comprises a helical ramp which slopes downwardly . . . [and] is preferably angled sufficiently to cause the particles to slide easily down transfer member 48 to second stage collector 38.” (4:66-67, 5:1-3.) This reinforces a clear link between transfer member 48 and the relevant function.

Dyson’s attempt to limit the disclosed structure to spout 74 is also fundamentally contrary to Bissell’s disclosures of the spout’s function. Figure 6 explicitly describes guide or spout 74 as an *optional* structure that may but need not be used to supplement particle transfer member 48 in directing particles. (6:55-70.) “In this embodiment [FIG. 6], guide or spout 74 is optionally provided to direct particles from transfer member 48 to side container 70.” (6:58-60.) The patent itself indicates that guide or spout 74 does not perform the relevant function independently of transfer member 48. It would be improper to restrict the “directing means” to guide or spout 74, as Dyson proposes, when the patent plainly identifies other structures, especially transfer member 48,

as performing the relevant function. *See Micro. Chem., Inc. v. Great Plains Chem. Co., Inc.*, 194 F.3d 1250, 1258 (Fed. Cir. 1999) (“A means-plus-function claim encompasses all structures in the specification corresponding to that element and equivalent structures.”).

The Court adopts Bissell’s proposed construction of “directing means for directing particles from the first particle separating means to the first particle collecting means.”

2. ‘489 Patent, Claim 3(d): “particle transfer member”

The parties propose the following constructions of the term “particle transfer member” as it appears in Claim 3(d) of the ‘489 Patent.

Claim Term	Dyson Proposed Construction	Bissell Proposed Construction
‘489/3 (d) a <u>particle transfer member</u> positioned between the particle separation member and the particle collector, at least a portion of the particle transfer member is angled downwardly to the first particle collector whereby particles separated by the particle separation member are conveyed to the particle collector	Downwardly sloping or angled structure that is not part of the particle separation member or the particle collector and which alters the motion of particles (Jt. State./Reply Br.)	A downwardly sloping or angled structure configured to alter the motion of particles. (Jt. State./Reply Br.)

The claim emphasizes three things about the particle transfer member: (1) the particle transfer member is positioned between the particle separation member and the particle collector; (2) the particle transfer member angles downward, sloping to the particle collector; and (3) the downward angle of the particle transfer member conveys separated particles to the particle collector. Both parties’ constructions capture these elements. The issue is whether the claim requires that the

particle transfer member be separate from the separation and collector members. Dyson insists this is inherent in the claim language of “positioned between.” Bissell disagrees.

The patent language supports Bissell’s construction and includes no convincing basis upon which to imply a “separateness” requirement not present in the text. The repeated focus of the patent language related to the claim term emphasizes the downward slope of the transfer member that permits particle movement by gravity. (*See, e.g.*, 4:54-56; 4:67-5:7; 5:17-20; 7:18-22). Neither the Court nor Dyson has identified a single textual reference in the patent that requires “separateness.” Dyson’s argument boils down to a claim that the word “between” – at least when construed alongside the figures in the patent – inherently requires “separateness.” But this is not so: something can be between two other things without being separate from them, as in the common situation of a shared wall between two offices or apartments. The Court will not imply a claim term that the drafter did not include and that logic does not require. *See Brookhill-Wilk 1, LLC v. Intuitive Surgical, Inc.* 1294, 1298 (Fed. Cir. 2003) (Emphasizing that analytical focus belongs on language of the claims themselves).

The Court adopts Bissell’s proposed construction of “particle transfer member.”

3. *‘489 Patent, Claim 18(c): “particle transfer member positioned to transfer material separated by the first particle separation member”*

The parties propose the following constructions of Claim 18(c):

Claim Term	Dyson Proposed Construction	Bissell Proposed Construction
‘489/18 (c) a <u>particle transfer member positioned to transfer material separated by the first particle separation member</u> ;	Downwardly sloping or angled structure that is not part of the particle separation member or the particle collector and which alters the motion of particles separated by the first particle separation member. (Jt. State./Reply Br.)	A downwardly sloping or angled structure configured to alter the motion of particles that have exited from a first particle separation member. (Jt. State./Reply Br.)

Each party simply proposes the same construction it proposed for Claim 3(d), with an addition. To the extent the constructions proposed for Claims 3(d) and 18(c) replicate each other, the Court will apply the same analysis to both claims and adopt Bissell’s version of the term. *See Frank’s Casing Crew & Rental Tools, Inc. v. Weatherford Int’l, Inc.*, 389 F.3d 1370, 1377 (Fed. Cir. 2004) (Noting propriety of construing claim terms consistently throughout a patent unless the patent expressly calls for a different construction).

The remaining difference between the parties’ proposed construction of this term involves “particles separated” versus “particles that have exited” language. At oral argument, the parties acknowledged that their proposed constructions of the additional language sought to capture the same concept and reflected a difference in semantics, not substance. In light of that understanding, the parties agreed to a construction that would encompass the notions of both being separated by the separator and exiting the separator. The Court accepts the parties’ agreement on this point.

Accordingly, the Court construes “particle transfer member positioned to transfer material separated by the first particle separation member” as “a downwardly sloping or angled structure

configured to alter the motion of particles that have been separated by and exited from a first particle separation member.”

4. ‘181 Patent, Claims 1 and 29: “cyclonic airflow chamber”

After initial briefing was complete, the parties revised their initial proposed constructions of the claim term, proposing instead the following constructions of “cyclonic airflow chamber” as it appears in Claims 1 and 29 of the ‘181 Patent.

Claim Term	Dyson Proposed Construction	Bissell Proposed Construction
‘181/1 etc. a <u>cyclonic airflow chamber</u> for separating contaminants from a dirt-containing airstream, the housing further comprising	A chamber in which particles are separated from the vacuum’s air stream at least in part by centrifugal force. (Jt. State./Reply Br.)	A chamber that separates particles from the vacuum’s air stream at least in part by centrifugal force. (Jt. State./Resp. Br.)

In oral argument, the parties further agreed that an appropriate construction would incorporate both proposed constructions. Accordingly, the Court construes “cyclonic airflow chamber” as “a chamber used to separate particles from the vacuum’s air stream at least in part by centrifugal force.”

5. ‘181 Patent, Claim 1, “airstream outlet opening in an upper central portion” and “mounted in an upper portion;”

The parties propose the following constructions for these disputed terms:

Claim Term	Dyson Proposed Construction	Bissell Proposed Construction
‘181/1 an <u>airstream outlet opening in an upper central portion</u> of the dirt separation housing and in communication with the inlet opening;	An opening in the dirt separation housing that is located in or near the top of the dirt separation housing and lies on the longitudinal axis of the dirt separation housing. (Jt. State.)	The airstream outlet opening is centrally located in the top half of the dirt separation housing. (Jt. State.)

Claim Term	Dyson Proposed Construction	Bissell Proposed Construction
'181/1 a support element <u>mounted in an upper portion</u> of said dirt separator housing;	Attached to the dirt separator housing at or near the top of that housing. (Jt. State.)	Attached in the upper half of the dirt separator housing. (Jt. State.)

The parties' proposed constructions diverge primarily regarding the meaning of "upper" and "central." The court addresses each word in turn. Bissell proposes construing "upper" to mean "top half." Dyson construes "upper" more narrowly, limiting it to "at or near the top." The word "upper" itself is consistent with "top half." Nothing in the patent language suggests or compels a more limited construction. It is true that the figures in the patent generally disclose an opening at or near the top of the separation housing, as Dyson notes. However, it would be legally improper to limit the claim based on features of illustrative figures alone, particularly where additional intrinsic evidence supports a different conclusion. *See MBO Labs., Inc. v. Becton, Dickinson & Co.*, 474 F.3d 1323, 133-34 (Fed. Cir. 2007); *Playtex Prods., Inc. v. Procter & Gamble Co.*, 400 F.3d 901, 907 (Fed. Cir. 2005). In this case, the additional intrinsic evidence includes the prosecution history, which reveals that the Patent Office allowed Claim 1 to issue only after considering a prior patent, the "Wright et al. Patent," that disclosed an airstream outlet "in a lower portion of the housing." (Bissell Ex. C-1, Prosecution History of the '181 Patent, at 82.) In its decision to allow Claim 1, the Patent Office emphasized that Claim 1 of the '181 Patent differed from the Wright et al. Patent in placing the airstream outlet in an upper, rather than a lower, portion of the housing. (*Id.*) The Patent Office required no more limited description of the height at which the airflow outlet was placed. The Patent Office's decision framed the notion of "upper," against its opposite, "lower," not in terms of

the top or bottom edge of the structure. This is more consistent with an understanding of “upper” as “the top half.”

Neither party has proposed a convincing construction for the term “central.” Bissell’s proposed construction simply transforms the adjective “central” into the adverb “centrally” and leaves the term undefined. At oral argument, Bissell further suggested that “central” be construed as “away from the periphery.” Dyson’s proposed construction weaves something entirely new (a “longitudinal axis”) that lacks any textual basis in the patent, the prosecution history or even the extrinsic evidence. The Court rejects the parties’ proposed constructions of this word and chooses its own.

The problem with Bissell’s original proposed construction is that it does nothing to define or otherwise give limiting content to the disputed claim term. The problem with Bissell’s second proposed construction is that it focuses on the wrong point: the claim term “central” suggests an area defined by its relationship to the center of something, in this case the housing; Bissell focuses, instead, on the edge or the periphery of the housing, which has the effect of claiming too broad a region. The central area of a city, by analogy, is not the area “away from the suburbs;” rather, it is the area near the center of town. This discussion also highlights the problem with Dyson’s proposal: Dyson tries to limit “central” to a single set of points on a line in space (the “longitudinal axis”), but the claim term “central” suggests a region, not a point or set of points on a line. Using the same city analogy, the “central city” is not simply the geometric center point of town, but rather an area near the center. Based on these considerations, the Court construes “central” to mean “closer to the center than to the edge of the housing.”

Accordingly, the Court construes “an airstream outlet opening in an upper portion” as “the airstream outlet opening is located in the top half of the dirt separation housing and closer to the center than to the edge of the housing;” and the Court construes “mounted in an upper portion” as “attached in the upper half of the dirt separator housing.”

6. *‘181 Patent, Claim 1: “separator plate”*

Claim Term	Dyson Proposed Construction	Bissell Proposed Construction
‘181/1 a <u>separator plate</u> mounted to a lower portion of the support element above the dirt-collecting bin, and separating the cyclonic airflow chamber from the dirt collecting chamber.	A structure including a flat disc which (a) is annular or circular and (b) separates the cyclonic airflow chamber from the dirt collecting chamber. (Jt. State.)	A flange or disc between the cyclonic airflow chamber and the dirt collecting chamber. (Jt. State.)

The basic dispute here is whether the claim language of “plate” necessarily limits the claim to a particular shape: namely, “flat” and “annular or circular.” Bissell’s proposed construction does not limit the separator plate to a particular shape and is consistent with the claim language itself. (See 16:51-67; 17: 1-16.) By restricting the shape of the separator plate, Dyson’s proposed construction seeks to add concepts not present in the claim language. It is true that the description of a preferred embodiment referring to FIG. 4 describes the separator plate as “substantially annular.” (6:21.) But the patent language itself points out that the specific embodiments described are to be understood as illustrations, not limitations. (16:17-20.) “Reasonable variation and modification [from specific embodiments] are possible . . . without departing from the spirit of the invention which is defined in the appended claims.” (16:20-23.) Some of the appended claims describe the separator plate as circular or annular, while others do not. (16:51-67, 17:1-15.) The plain language

of the claims thus indicates that a separator plate may include an annular or circular disc but does not have to do so. Bissell’s proposed construction “stays true to the claim language and most naturally aligns with the patent’s description of the invention.” *See Phillips*, 415 F.3d at 1316 (quotation omitted).

Dyson’s proposed construction would also add that the structure separates the airflow chamber from the dirt collecting chamber. Adding this term would create unnecessary redundancy. Claim 1 already includes almost identical words elsewhere. (16:52-54.)

Accordingly, the Court adopts Bissell’s proposed construction of “separator plate.”

7. ‘181 Patent, Claim 37: “*perforated plate*”

Claim Term	Dyson Proposed Construction	Bissell Proposed Construction
‘181/37. The vacuum cleaner according to claim 36 and further comprising a <u>perforated plate</u> in a flow path between the upstream and downstream cyclones.	A flat disc which is annular or circular and which has holes through it. (Jt. State.)	A thin sheet with holes in it. (Jt. State.)

Dyson’s proposed construction would require that the perforated plate be annular or circular, while Bissell’s proposed construction would not limit the perforated plate to a particular shape. The patent language does not support, and indeed explicitly departs from, Dyson’s proposed construction. The patent states, for example, that “[i]n another embodiment, the outlet of the first cyclonic airflow chamber if [sic] formed by a perforated wall Typically, the perforated wall is substantially cylindrically shaped *but other shapes of the perforated wall can be used.*” (4:47-55.) (emphasis added.) Figure 15 depicts the perforated plate as a thin cylinder, not a flat disc. Claim 36 itself does

not impose any limitations on the shape of the perforated plate. Unlike Dyson's proposed construction, which would exclude embodiments the patent describes explicitly, Bissell's proposed construction is consistent with the language of the patent itself. The Court adopts Bissell's proposed construction of "*perforated plate*," as a "thin sheet with holes in it."

Conclusion

This Claim Construction Memorandum addresses only the limited patent terms the parties selected for construction at this time, hoping this Court's construction would facilitate framing and resolution of the issues on dispositive motion practice or trial. The Court anticipates addressing any further claims construction issues in the context of dispositive motion practice, and preparation of the final pretrial order and jury instructions on any claims or defenses that go to trial.

IT IS SO ORDERED.

Dated: June 10, 2010

/s/ Robert J. Jonker
ROBERT J. JONKER
UNITED STATES DISTRICT JUDGE